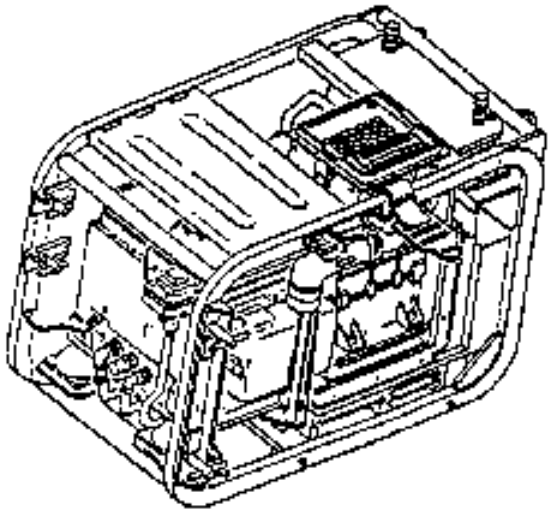
# *Pads AN/USQ-70*



**Primary function**: Artillery inertial survey system.
**Manufacturer**: Litton
**Weight**: 539 pounds (244.71 kilograms) including primary pallet, battery box, and transit case
**Transported by**: M151A2, M998 HMMWV, or UH-1
**Surveying Accuracy**:
**Horizontal Position Error**: 23 feet (7 meters)
**Vertical Position Error**: 9.8 feet (3 meters)
**Azimuth**: 0.4 mil
**Ambient Temperature Limits**:
**Operation**: -50 to +125° F (-10 to +51.62° C)
**Storage**: -50 to +160° F (-10 to +71° C)
**Power requirements**:
**Steady state load**: 961 watts, 40 amp, 24 VDC
**Transient (warm up) load**: 97.4 amp at 24 VDC
**Units**: Artillery Survey Sections in artillery regiments and battalions; Unmanned Aerial Vehicle units
**Crew**: 2 enlisted
**Introduction date**: November 1985
**Unit Replacement Cost**: $299,115

**Mission**: The Position Azimuth Determining System provides rapid and accurate measurements in position, elevation and azimuth to firing elements.

**Features**: The AN/USQ-70 Position Azimuth Determining System is a highly mobile surveying system using an inertial measurement unit interfaced with a general purpose digital computer. Its purpose is to provide a highly mobile and accurate means of performing artillery survey.
The major components of the AN/USQ-70 are: the Inertial Measurement Unit, the Control and Display Unit, the computer, the power supply, the installation kit, and the electrical cable set. Other associated components are: the primary pallet, the battery box, and the transit case.